Trilateral Chair PhDs Scholarships in JOOUST

2 PhD scholarships in Transformative Innovation, the 4th Industrial Revolution and Sustainable Development (2020)

Call for PhD Proposals
The Jaramogi Oginga Odinga University of Science and Technology (JOOUST) in collaboration with the African Network for the Economics of Learning, Innovation, and Competence Building Systems (AfricaLics), currently based at the African Centre for Technology Studies (ACTS), Nairobi is offering two (2) fully funded PhD scholarships. These scholarships fall within a 5-year trilateral research programme on Transformative Innovation, the 4th Industrial Revolution and Sustainable Development that is funded by the South African National Research Foundation and the British Council, United Kingdom. The Programme is a partnership between the University of Johannesburg (UJ), South Africa, ACTS and the Science Policy Research Unit (SPRU) at the University of Sussex in the UK. It seeks to strengthen African scholarship on transformative innovation and policy in the context of the 4th industrial revolution and efforts to achieve the Sustainable Development Goals (SDGs). The PhD project will support the programme’s agenda.

Type of award
Postgraduate Research based scholarship
The award falls under the School of Informatics and Innovative Studies (SIIS), JOOUST.

PhD project
About the research programme
We are inviting proposals for PhD research projects under our five-year programme, the “Transformative innovation, the 4th Industrial Revolution and sustainable development programme” which is a research based collaboration between the UJ, ACTS and SPRU. The programme builds on complementary and overlapping expertise amongst the three partners to strengthen African scholarship for examining transformative innovation, and developing transformative innovation policy, in the context of the fourth industrial revolution (4IR) and efforts to achieve sustainable development. Over the course of the programme, we expect to support a total of eight PhD projects with full scholarships: five based at the University of Johannesburg, South Africa, two based at JOOUST, Kenya, and one based at SPRU in the UK. All
PhD candidates will undertake joint workshops and short training courses in South Africa, Kenya and the UK, and all PhDs will involve some degree of joint supervision across the partner organizations. Below, we provide some background information on the research issues the programme seeks to address. Using this information, we invite prospective candidates to submit a research proposal as part of their PhD application. Preference will be given to proposals that involve comparative research between two or the three related countries (South Africa, Kenya and the UK). Details of what is expected in a proposal, and how to apply, are given at the end of this call text.

Research issues under this programme

1) Transformation in energy systems
Electricity access is assumed to be transformative in many ways, including improved educational outcomes, reduced health problems because of avoided kerosene fumes, new economically-productive opportunities, enhanced connectivity through Information, Communication and Technology (ICT) and more. This research theme will investigate the transformational impacts and possibilities co-evolving with the introduction and expansion of renewable electrification especially solar PV in Kenya and South Africa.

2) Mobile Money
ICT infrastructure, especially connectivity, plays an increasingly critical role in driving sustainable growth and prosperity; in particular, digital technologies. In the African context, the mobile phone system has proven to be a ‘leapfrog’ technology, providing tools for information generation and sharing to communities that previously had no access to telecommunications. This research theme will explore how digital innovations may be harnessed to achieve the SDG agenda more generally, particularly in the African context.

3) Agricultural biotechnologies in the 4IR
The future of biotechnology is unfolding in the era of the 4IR, and it is poised to revolutionise lives through the employment of living organisms or parts of them in making useful products such as nutritional compounds, environmentally friendly chemicals, biofuels and novel functional materials. This research theme will explore the socio-technical system in which biotech applications are embedded, examining the factors that reduce uncertainties relating to how opportunities for niche development can be enhanced. Studies will be conducted in Kenya and South Africa.

4) Unpacking the role that the 4IR plays in transforming industrial production systems in Africa
Most countries that have managed to reach high levels of economic and social development have done so by advancing their industrial sectors. However, industrialization patterns have also been accompanied by profound income
disparities, social exclusion and unsustainable environmental practices and effects. The transformation of production depends heavily on technological choices and innovation activities. This research theme will explore the new sets of collaborations, networks, interactions and processes of co-creation that may need to be supported from a policy perspective to support the 4IR in the two countries and Africa in general. These include new types of collaboration between industry and knowledge generating institutions (such as universities and research centres) as well as the wider society.

**Amount**
1) The JOOUST -based candidate will receive a full scholarship to cover their tuition fees and basic living expenses as per the Universities policies. Students will have to be registered as full-time in order to receive the full studentship.
2) Doctoral degree studies require a minimum of three years and a maximum of four years registration for full-time studies.

**Eligibility**

a) Be a holder of a Masters in Agriculture, Environment, Energy, Information Communication and Technology (ICT), Business Management, Entrepreneurship, Sociology, Public Administration, Engineering, Technology Management, Bio Economy (Biotechnology, Nanotechnology etc.), Sustainable Development, Science and Technology Policy or related discipline from recognized Universities across Africa. The applicant **MUST** demonstrate experience in sustainable development and innovation, and deep knowledge of an African context. Preference will be given to applicants with interdisciplinary Masters in relevant fields: e.g. Innovation Studies, Development Studies, etc.

b) Fulfill specific requirements including course work as maybe stipulated by the respective Department, School/Institute with regard to the field of study.

c) The research proposal must demonstrate interdisciplinary methodological skills.

d) Only applicants from Kenya are eligible.

**Number of scholarships available**
Two

**Deadline**
31 March 2020

**How to apply**
Applications should be sent by email to Dr Ann Kingiri ([a.kingiri@acts-net.org](mailto:a.kingiri@acts-net.org)) and Dr. Calleb Olweny at [callebolweny@yahoo.com](mailto:callebolweny@yahoo.com) by 31 March 2020. Please mark the subject as “Trilateral Chair PhD scholarship application”.
Please provide the following, compiled into one PDF document

1) A one-page covering letter explaining the applicant’s motivation for pursuing this PhD. Please indicate which JOOUST faculty member or approved visiting academics/Professor might supervise the PhD and whether they have been contacted about this.

2) Candidate’s CV.

3) A recommendation letter (may be from a supervisor and/or a senior professional in a relevant field).

4) A short proposal (maximum 10 pages) describing the candidate’s proposed PhD research. Proposals will be selected on the basis of the alignment of the proposed research with the theme of this Call. See below for guidance on the proposal structure.

We welcome applications from suitably qualified people, regardless of ethnicity, age, disability, gender or sexual orientation.

**PhD proposal structure**
The proposal should be no longer than 10 pages, and must include the following:

1) Introduction

2) Summary of Preliminary Literature Review (*must include literature in Innovation studies*).

3) Theoretical/Conceptual Framework (*must include relevant concepts in Innovation studies*).

4) Main research question and/or research objectives

5) Planned research methodology

6) Proposed structure of the study

7) References

**Contact us**
Please direct enquiries about the scholarship to Ann Kingiri at a.kingiri@acts-net.org

More information about Doctoral studies at JOOUST please visit the University website ([www.jooust.ac.ke](http://www.jooust.ac.ke)) while general queries can be sent to Dr. Calleb Olweny of JOOUST on callebolweny@yahoo.com

**Important dates**

1) Deadline for submission of applications: 31 March 2020

2) Interview: week beginning 20 April 2020

3) Selection by the end of April 2020 or soon after